



Installation Instructions

Part No. 30MP70000801, 30MP70000901, 30MP70001001, 30MP70001101,
30MP70001201, 30MP70001301

SAFETY CONSIDERATIONS

Installation of this accessory can be hazardous due to system pressures, electrical components, and equipment location (such as a roof or elevated structure). Only trained, qualified installers and service technicians should install, start-up, and service this equipment.

When installing this accessory, observe precautions in the literature, labels attached to the equipment, and any other safety precautions that apply:

- Follow all safety codes
- Wear safety glasses and work gloves
- Use care in handling and installing this accessory

It is important to recognize safety information. This is the safety-alert symbol: . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION, and NOTE. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

WARNING

Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation and service. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

GENERAL

The 30MP compressor insulation is intended to insulate the scroll compressor and keep water vapor from condensing on the colder compressor surface. The material is 3/4 in. thick PVC foam. Once properly installed, the insulation will provide an airtight seal and should not require further maintenance. The insulation package differs depending on the chiller model; consult Table 1 for specific package applications.

Check each insulation item to be sure it was not damaged during shipping. Inspect for tears and nicks on each surface, including the masked adhesive surface. If any damage is found, file a claim with the shipping agent immediately. If any item is missing or if any part does not assemble properly, notify your Carrier representative. Table 2 lists the insulation contents for each package.

Table 1 — Accessory Package Contents

30MP UNIT	PACKAGE (KIT) REQUIRED
017, 021	30MP70000801
031, 033	30MP70000901
041, 046	30MP70001001
051, 056	30MP70001101
066	30MP70001201
080	30MP70001301

Table 2 — Package Contents

ACCESSORY PART NO.	PART NUMBER	DESCRIPTION	QTY
30MP70000801	30MP500535	Bottom Insulation	2
	30MP502205	Shell Insulation	2
	30MP502227	Block Insulation	1
	2004628562	Shell Insulation	1
	LF31-109	Insulating Tape	16ft
	PF01-44	Cork Tape	8ft
30MP70000901	30MP500535	Bottom Insulation	2
	2004987156	Shell Insulation	2
	LF31-109	Insulating Tape	16ft
	PF01-44	Cork Tape	8ft
30MP70001001	30MP500535	Block Insulation	3
	2004628577	Bottom Insulation	3
	LF31-109	Shell Insulation	16ft
	PF01-44	Cork Tape	8ft
30MP70001101	30MP500535	Block Insulation	2
	2004618646	Bottom Insulation	3
	2004618647	Shell Insulation	2
	LF31-109	Insulating Tape	16ft
	PF01-44	Cork Tape	8ft
30MP70001201	2004618646	Bottom Insulation	2
	2004618647	Shell Insulation	1
	2004623464	Block Insulation	2
	2006302444	Bottom Insulation	1
	2004956269	Shell Insulation	1
	LF31-109	Insulating Tape	16ft
30MP70001301	PF01-44	Cork Tape	8ft
	2004618646	Bottom Insulation	2
	2004623464	Block Insulation	2
	2006302444	Shell Insulation	2
	2004956269	Shell Insulation	2
	LF31-109	Insulating Tape	16ft
PF01-44	PF01-44	Cork Tape	8ft

INSTALLATION CONSIDERATIONS

Tools needed:

- 3/8 in. socket with ratchet
- 3/8 in. nut driver
- box knife
- flathead screwdriver
- rags and cleaner
- lockout tag

Materials supplied by installer:

- Caulk compatible with flexible foam insulation rated for outdoor conditions.
- Preferred caulk:
 - PowerHouse Siliconized Acrylic Latex Sealant™¹
 - White Lightening 3006 Ultra^{®1}
 - Leak Stopper Rubber Flexx^{®1}

INSTALLATION

WARNING

Before beginning installation of this equipment, be sure all power to the unit is disconnected, and that tags are properly placed to alert others. Electrical shock can cause personal injury and death.

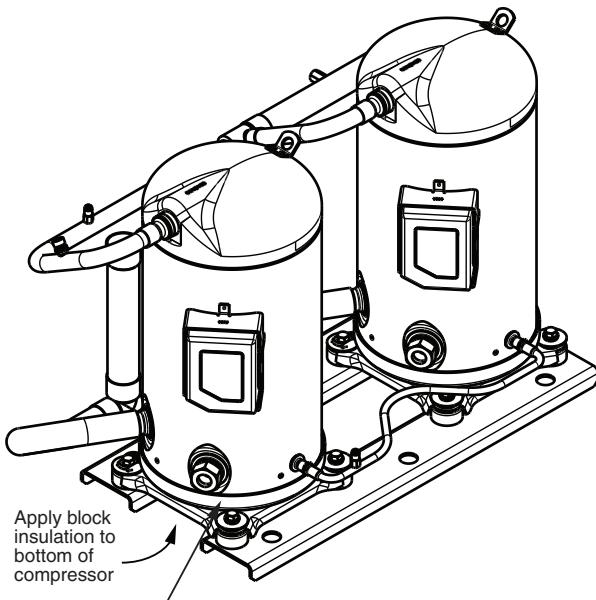
Preassembly

Clean the shell and base of each compressor thoroughly, removing all dirt and moisture on the shell and bottom side of each compressor. It is also important to clean the compressor mounting channel around each compressor. This will ensure a clean surface for the adhesive.

For installing the compressor insulation follow these steps:

1. Turn off unit power supply and install lockout tag.
2. For units with compressor crankcase heaters installed: Loosen heater tightening screw on heater band and position heater band so heater wires are directly below terminal box. See Fig. 1. Tighten band screw to secure.
3. Apply the block insulation piece with adhesive side attached to the bottom of the compressor. For 30MP017 units, cut along the dashed lines as shown in the top of Fig. 2 to obtain the block insulation piece for compressor A1. The other block insulation piece is to be attached to compressor A2. Press the insulation firmly to ensure good adhesion. See Fig. 1.
4. Cut the bottom insulation piece along the slit. (See Fig. 2.) The adhesive surface should be facing down, applied to the mounting channel. Apply the bottom insulation piece around the base of the compressor. Be sure to align the channel mounting bolts with the insulation holes.
5. Seal the area between the terminal box and the compressor shell by applying cork tape around the terminal box. Do not apply cork tape over electrical conduit connectors. (See Fig. 3.)
6. (30MP051-080 units: skip to Step 11.) Before applying the shell insulation piece, cut out area for the terminal box on the insulation piece. See Fig. 4.
7. For units with digital compressors only: Cut out the digital box location. Seal the area around the digital box with cork

tape before installing the insulation. Put the digital box wiring on the outside of the insulation by making a cut from the box to the side of the insulation and pulling the wires through.



Units with compressor crankcase heaters:
Adjust heater band to align heater wires.
Do not move heater band up or down on compressor.
Rotate heater band into position without moving up or down.

Fig. 1 — Apply Block Insulation to Bottom of Compressor

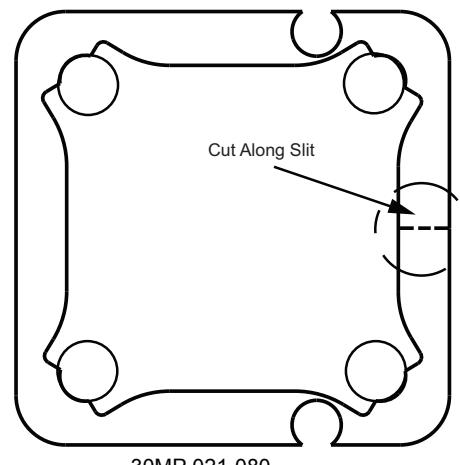
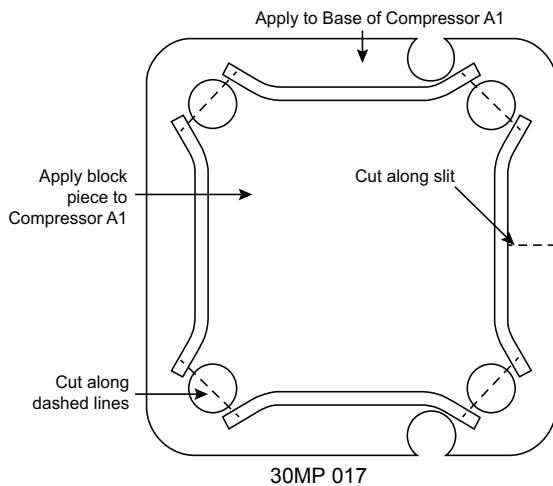


Fig. 2 — Cut Bottom Insulation

¹ Third-party trademarks and logos are the property of their respective owners.

8. For 30MPA, MPW31-046 208/230-v, 380-v, and 575-v units only: Cut along the right path for the conduit. Cut from the terminal box to the sight glass slit. See Fig. 4.
9. For units with compressor crankcase heaters installed: Make two cuts for the heater conduit, following both paths from terminal box to the sight glass slit. See Fig. 4.
10. For all units with compressor crankcase heaters installed: Cut a slit path along the bottom of the shell insulation to avoid contact with the crankcase heater.

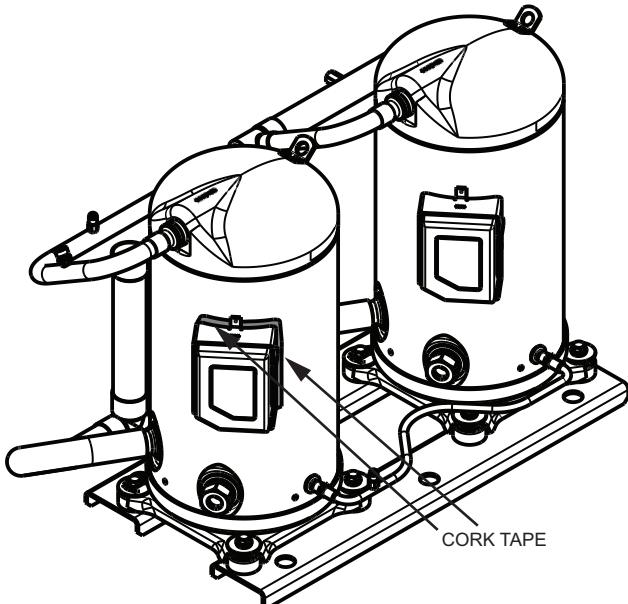


Fig. 3 — Seal Area between Terminal Box and Shell (All Compressors)

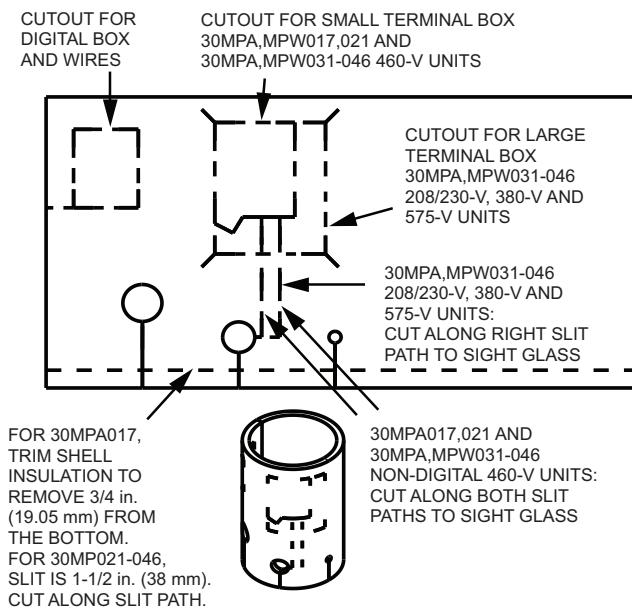


Fig. 4 — Cut Shell Insulation Before Applying

11. Begin by applying the shell insulation to the area around the terminal box and wrapping the insulation around the compressor from there. Be sure not to cover the crankcase heater, if equipped. Rather than removing all the backing before installation, it is best to remove the backing as the insulation is wrapped around the compressor shell. If necessary, the shell insulation can be cut into two pieces to make

the wrapping easier. Press the insulation down firmly, especially around edges, to ensure proper adhesion.

12. 30MPA, MPW041 and 046 units only: For compressor A3, the control box may need to be shifted out to allow for wrapping the shell insulation around the compressor. Loosen the eight control box retaining bolts (four on each side of the unit) and carefully shift the control box outward to allow enough space to access compressor A3. See Fig. 5.

IMPORTANT: Be sure to keep enough slack in the control wires when shifting the control box. It is recommended that more than one person move the control box. Properly support control box when shifting from its original position.

Install shell insulation on compressor A3.

Return control box to original position and tighten the four control box retaining screws on either side of the unit.

13. After all insulation is applied to all compressors, the seams and open areas should be sealed using the supplied insulating tape or caulk. See Fig. 6. Be sure to seal the mating seam for the shell, the gaps between the base pieces, and the slits for the digital box on the shell. Tape or caulk all suction and discharge lines as well as the area around the terminal box, including the conduit connections. Also, apply tape or caulk around the top of the shell insulation piece to keep air from getting between the insulation and compressor. Press down firmly on the tape to ensure a good hold. Do not cover the oil level sight glass. On units with a crankcase heater, tape over the heater conduit, but be careful not to cover the crankcase heater.

14. For units with compressor crankcase heaters power conduit installed: Cover heater conduit with adhesive tape. See Fig. 6.

15. Remove lockout tag and return unit to service.

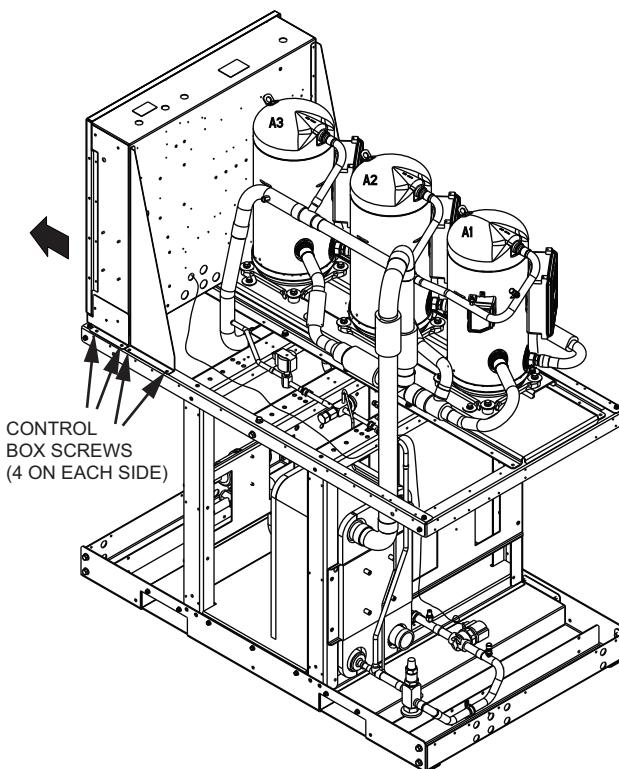
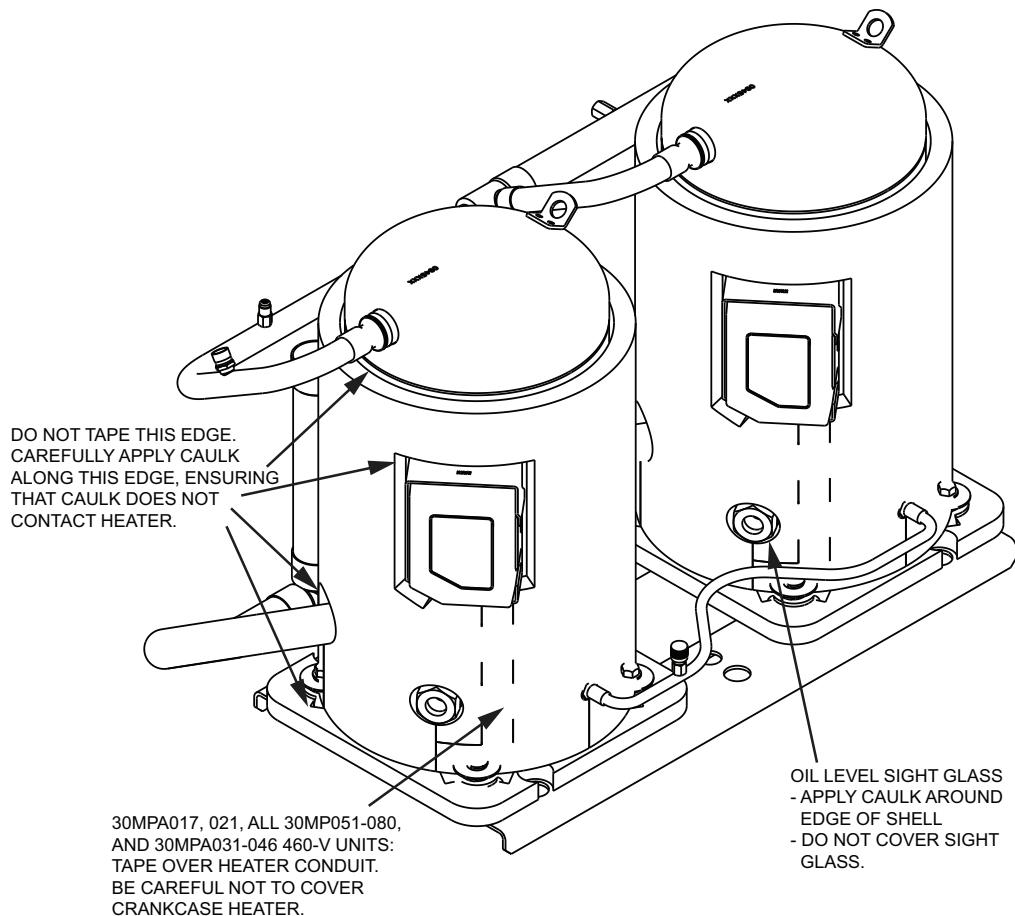
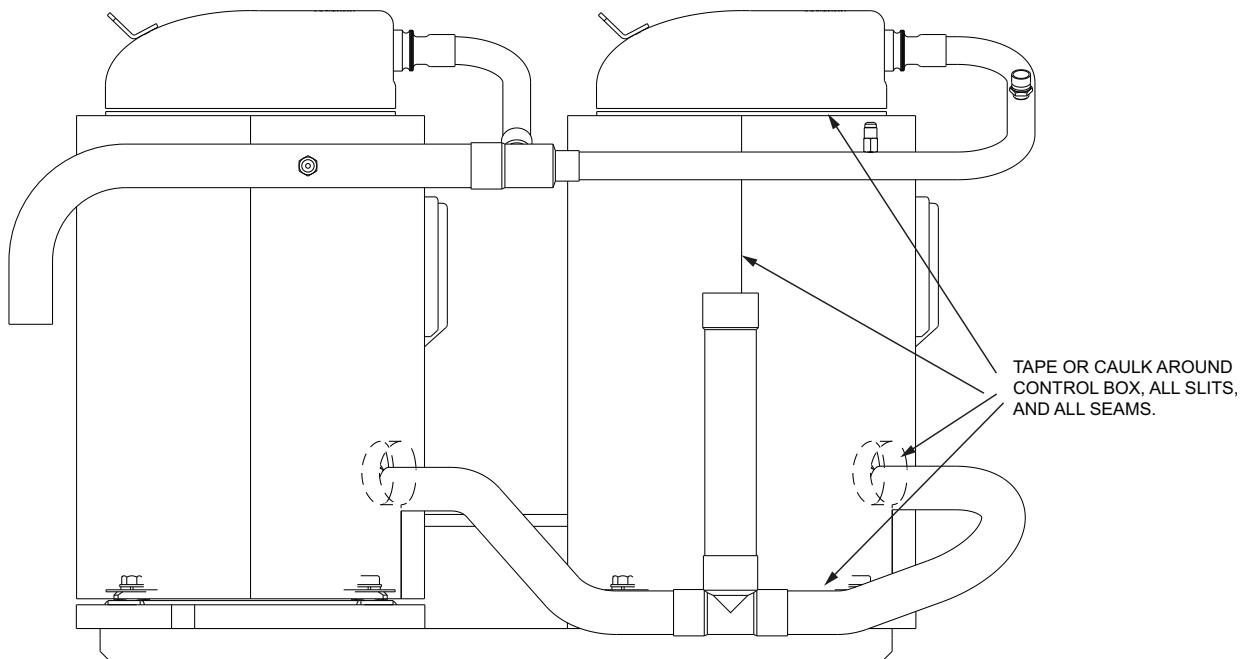


Fig. 5 — Shift Control Box (30MPA, MPW041-46 Units)



(NON DIGITAL 15T COMPRESSOR SHOWN)



SIDE VIEW

Fig. 6 — Seal Seams, Slits, and Openings